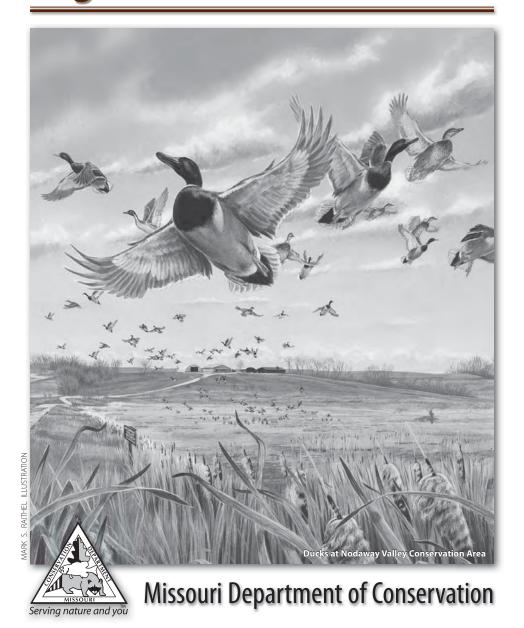
Waterfowl Hunting Digest 2008–2009



Introduction to Missouri Waterfowl Hunting

issouri waterfowl hunters now have more days and more places to hunt than ever. Hunters can hunt eight months out of the year beginning with teal season in September and ending with the conclusion of the light goose Conservation Order in April.

More places to hunt are due to extensive wetland restoration efforts. In the last 15 years, federal and state agencies, conservation organizations, and concerned citizens have restored 25,000 acres of public wetlands and over 100,000 acres of private wetlands—a small portion of the 87 percent of wetlands lost in Missouri. Today's hunters now have the opportunity to hunt such varied habitats as shallow-flooded wetlands, flooded crop fields, flooded timber, dry crop fields, streams, rivers, ponds and reservoirs.

2008–2009 Waterfowl Hunting Outlook

The good news is that hunters will be provided with a 60-day duck season for the 12th consecutive year and have ample goose hunting opportunity with a 79-day Canada goose season and light goose hunting that begins on Oct. 25 and ends with the close of the Light Goose Conservation Order on April 30.

Expectations for the 2008–2009 waterfowl season in Missouri should be tempered somewhat by lower duck numbers overall, fewer young in the fall flight, and less available food due to extensive spring and summer floods. The impacts of flooding on specific wetlands depended on the timing and duration of flooding. Floods late in the summer afford less time for moist-soil plants and replanted crops to mature and provide food for migrating waterfowl. Additionally, some floods caused damage to levees and water-control structures on public and private wetlands. Of all the regions of the state with high densities of wetlands, southeast Missouri was least affected by flooding.

Hunter success in Missouri often differs from expectations based on pre-season reports. Missouri hunters have had some of their best hunting when early expectations were low and poor hunting when expectations were high. Timely migrations and favorable weather patterns, combined with season dates that bracket both early and late hunting preferences, should provide hunters with a variety of hunting opportunities during the upcoming waterfowl season.



Missouri Department of Conservation P.O. Box 180 Jefferson City, MO 65102-0180 573/751-4115 www.missouriconservation.org

Status of Habitat on the Breeding Grounds

Following three consecutive years of improved wetland conditions, drought dried many wetlands on the duck breeding grounds. The number of wetlands with water during spring 2008 declined by 37 percent from 2007. Prairie Canada and the Dakotas were the hardest hit with declines in wetland numbers ranging from 27 percent to 46 percent. Conditions north of the Canadian prairies in the parklands remained fair to good. Late spring rains over the eastern Dakotas eased the drought somewhat and improved habitat for re-nesting and brood rearing. Without additional precipitation, habitat may continue to deteriorate into next spring. While drought may result in lower duck populations in the near-term, periods of dry conditions are essential to maintain the long-term health and productivity of wetlands.

Duck Status

Below average precipitation in key areas contributed to a decline in total ducks from 41.2 million during 2007 to 37.3 million during 2008. Although the 2008 estimate represents a 9 percent decline from 2007, duck populations remain 11 percent above the long-term average (1955–2007). The mallard population estimate of 7.7 million in the traditional survey area was down 7 percent from the 2007 estimate of 8.3 million but was similar to the long-term average.

Species that declined from 2007 include gadwall (down 19 percent), northern shovelers (down 23 percent), canvasbacks (down 44 percent), American wigeon (down 11 percent), and northern pintails (down 22 percent). Blue-winged teal, green-winged teal, redheads and scaup populations were similar to 2007. The encouraging news is that populations of blue-winged teal (up 45 percent), green-winged teal (up 50 percent), gadwall, shovelers (up 56 percent each), and redheads (up 50 percent) are still well above their long-term averages. Although scaup numbers were similar to 2007, their numbers remain a concern because they are still 27 percent below their long-term average.

Goose Status

Canada goose harvest in Missouri primarily consists of giant Canada geese that nest in Missouri, Iowa, Minnesota and Manitoba and the Eastern Prairie Population (EPP) Canada geese that nest along the coast of Hudson Bay in northern Manitoba.

After several years of rapid expansion, giant Canada goose populations in the Mississippi Flyway and Missouri have stabilized. The 2008 Mississippi Flyway estimate of 1.7 million giant Canada geese is similar to the estimate of 1.6 million in 2007. In Missouri, the 2008 estimate of 69,000 was similar to the previous eight years.

Early to average arrival of spring along the Hudson Bay coast each of the last four years has contributed to excellent nesting conditions for EPP Canada geese. This year's estimate of 161,000 EPP Canada geese represented by singles and pairs was similar to the 2007 estimate of 153,700.

The fall flight of white-fronted geese and light geese (snow, blue and Ross's geese) is expected to be similar to the last few years. After the light goose population peaked at 3 million in 1998, it appears to have stabilized at approximately 2.5 million. The white-fronted goose population estimate of 764,300 is similar to 2006 and the highest since 2000.

New Bag Limits in 2008–2009

The canvasback season is closed. Compared to most duck species, the canvasback population is very small at only 500,000. As a result, regulations tend to err on the conservative side. This year's population estimate is 44 percent below 2007 and 11 percent below the long-term average. Analysis by the U.S. Fish and Wildlife Service indicate that this decline was not the result of the increase to a two-bird bag limit in 2007.

Scaup daily bag limit is reduced from 2 to 1: Although relatively stable the last few years, the scaup population has declined 27 percent from the long-term average. While this decline is not attributed to harvest, the current population can no longer sustain the harvest rates it once did according to the U.S. Fish and Wildlife Service.

Wood duck daily bag limit is increased from 2 to 3: The restoration of wood duck populations has been one of the success stories of wildlife management. In the Mississippi Flyway, wood duck numbers have experienced an estimated annual growth rate of 1.4 percent over the last 30 years. Analysis of harvest rates suggests that wood ducks can now support an additional bird in the daily bag limit.

Land Use Changes on Breeding Grounds Could Affect Future Duck Populations

We've enjoyed abundant duck populations and long hunting seasons as a result of strong agricultural conservation programs, effective wetland regulations, and aggressive habitat restoration and protection through the North American Waterfowl Management Plan. This situation is rapidly changing with weakened wetland regulations and agricultural conservation programs that cannot keep pace with higher commodity prices. In 2007 alone, landowners took an astounding 771,200 acres out of Cropland Reserve Program (CRP) in the portions of the Prairie Pothole Region located in North Dakota, South Dakota and Montana. At the same time, farmers converted thousands of acres of native prairie to cropland. It is estimated that by 2012, 3.6 million acres of CRP could be lost and an additional 383,000 acres of native prairie plowed up in the portions of the Prairie Pothole found in North Dakota, South Dakota and Montana.

Rationale for Duck Season Timing

Based on hunters' desires for later seasons, Missouri moved the opening date back about a week in each zone beginning in 2004. Since then the duck season has opened on the last Saturday in October in the North Zone, the first Saturday in November in the Middle Zone, and the Friday after Thanksgiving in the South Zone. This season structure provides a potential range of opening dates from Oct. 25 through Oct. 31 in the North Zone; from Nov. 1 through Nov. 7 in the Middle Zone; and in the South Zone, the Friday after Thanksgiving falls anywhere from Nov. 23 through Nov. 29. Maintaining opening dates associated with specific weeks of the month allows the timing of duck season to vary by seven days within a six-year period and accommodates those with earlier or later preferences over this period of time.

Rationale for Thanksgiving Day South Zone Duck Opener

Annual survey results suggest hunters in the South Zone prefer late season hunting opportunity. Maintaining the traditional Friday after Thanksgiving opener in the South Zone and closing by the last Sunday in January—the latest date allowed according the federal framework-would have resulted in a 59-day season. Based on survey information, only 32 percent of South Zone duck hunters oppose a Thanksgiving day opener. Similar numbers of people hunt ducks on Thanksgiving Day in the North and Middle zones as on a typical weekend day. On public areas in the North and Middle zones, the four-day Thanksgiving weekend is second only to the opener in terms of popularity.

REPORT YOUR BANDS www.pwrc.usgs.gov/bbl

Bird banding programs provide valuable information on a wide variety of migratory game birds. Bands recovered and reported by hunters provide important information about survival, migration, and harvest rates and distribution.

To report band numbers from all types of birds (except pigeons), go on-line at **www.pwrc.usgs.gov/bbl**. You can also report bands by calling 1-800-327-BAND (2263). You will receive a certificate of appreciation and information about the bird you reported. The band is yours to keep!

Ducks and Coots

Shooting Hours: 1/2 hour before sunrise to sunset

Season Dates: see table on back cover

Limits:

Coots
Ducks: The daily bag limit of ducks is 6 and may include no more than:
Mallards 4, but no more than 2 females
Mottled ducks
Wood ducks (new limit)
Redheads2
Hooded mergansers
Black duck1
Pintail
Scaup (new limit)1
New! Canvasback season is closed.

The **possession limit** of ducks is 12 (twice the daily bag limit; varies by species.)

Geese

Shooting Hours: 1/2 hour before sunrise to sunset

Season Dates: See table on the back cover.

Limits:

The daily bag limits of geese are:

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Blue,	snov	v and	Ross'	s (al	l sp	eci	es	CO1	mk	in	ed	l) .	 	 	 			 	20)
White	e-fror	nted											 	 	 			 	2	2
Brant													 	 	 			 	1	L
Cana	da:																			
Se	pt. 2	7–Oct	. 5										 	 	 			 	3	3
No	ov 2	2_Jan	30																5)

The **possession limits** of geese are twice the daily bag limits, except there is no possession limit for blue, snow and Ross's geese.

WATERFOWL STATUS ONLINE

For hunting reports that are updated twice a week, results of waterfowl counts conducted every other week and a wealth of other information about waterfowl hunting in Missouri, go to: www.mdc.mo.gov/hunt/wtrfowl

New! The U.S. Fish and wildlife Service in collaboration with flyway and state waterfowl managers created a website that contains information about waterfowl status and regulations, where banded ducks are harvested each year and other monitoring efforts. To see this new site, go to: **Flyways.US**



Youth Waterfowl Hunting Days

In 2008, there are two youth-only waterfowl hunting days in each zone for ducks, geese and coots. Youth hunters must be:

- ▶ age 15 or younger
- ▶ accompanied by an adult who is not allowed to hunt ducks but who can participate in other open seasons.

No permits are required for youth hunters. Nonhunting adults, however, must possess any permit that allows small game hunting in Missouri unless the youth hunter possesses a valid hunter education certificate card.

Shooting Hours: 1/2 hour before sunrise to sunset

Season Dates: North Zone: Oct. 18–19

Middle Zone: Oct. 25–26

South Zone: Nov. 22–23

Limits: The same as during the regular waterfowl season, including geese (2 Canada geese, 2 white-fronted geese and 20 light geese per day).



Falconry Season for Ducks, Coots and Mergansers

Season Dates and Hunting Hours:

- ▶ Sept. 6–21 statewide with hunting hours from sunrise to sunset
- ▶ during youth and regular duck seasons (see back cover for zones and dates) with hunting hours 1/2 hour before sunrise to sunset
- ► Feb. 10-March 10 statewide with hunting hours 1/2 hour before sunrise to sunset

Limits: The **daily bag limit** is 3 and the **possession limit** is 6, singly or in the aggregate. The falconry bag limit is not in addition to gun limits.

Spring 2009 Conservation Order: Jan. 31-April 30

A light goose Conservation Order will be in effect for the 11th consecutive year during spring 2009. The U.S. Fish and Wildlife Service implemented the Conservation Order to reduce numbers of snow and Ross's geese because they have rapidly increased in number and are causing damage to portions of the fragile arctic tundra. The Conservation Order for light geese (snow geese, including blue color phase, and Ross's geese) will be in effect from Jan. 31–April 30 with no bag limit. Hunters may use electronic calls and unplugged shotguns and shoot from 1/2 hour before sunrise to 1/2 hour after sunset.

A valid Missouri Migratory Bird Hunting Permit is the only permit required for residents and nonresidents during this time. A Missouri small game hunting permit and federal duck stamp are not required during the Conservation Order.

Managed Waterfowl Hunting in Missouri

The Conservation Department provides managed waterfowl hunting on 15 conservation areas, which are listed on the following pages. These intensively managed areas provide waterfowl with much needed resources during spring and fall migrations. The Department limits the number of parties on these areas to give hunters an opportunity for a quality hunt. Resident hunters can hunt these areas by applying for a reservation each year beginning in early September. *Note: Residents and nonresidents who do not have a reservation may attend a morning drawing or hunt with residents who have a reservation.*

Some of the managed waterfowl areas have permanent blinds, and others provide opportunity for hunters to wade in or hunt from layout boats or boat blinds. Most have disabled-accessible blinds. Additional information about Missouri's managed waterfowl hunting can be found at www.mdc.mo.gov/hunt/wtrfowl/

Draw System Favors Larger Parties

Seven managed wetland areas employ the "every member draws" (EMD) procedure to allocate unreserved hunting opportunity.

EMD allows each member of a hunting party (maximum party size of four) to draw a numbered pill and then use its lowest number to determine the group's place in line for selecting a hunt location. The system provides larger parties a greater chance of drawing a more favorable position, and resulted in an additional 3,400 hunter trips—a 30 percent increase from previous years—without impacting individual or party duck harvest, daily hunter satisfaction or hunt safety. The EMD procedure does not change the way reservation holders draw for positions.

Conservation areas using EMD are Bob Brown, Columbia Bottom, Eagle Bluffs, Grand Pass, Marais Temps Clair, Otter Slough and Ten Mile Pond. The remaining managed wetland areas turn fewer people away and, therefore, would not benefit from EMD.

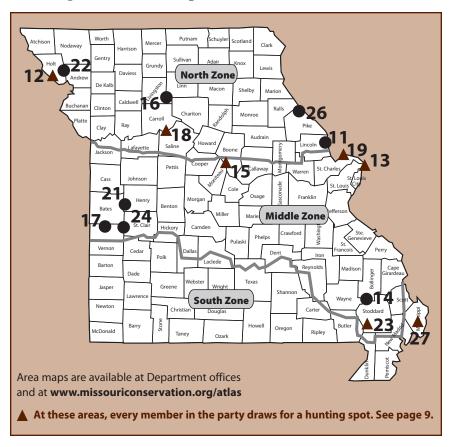
BE AN ETHICAL HUNTER

- Respect Other Hunters—Your enjoyment, and theirs, will result from mutual courtesy in the marsh.
- ✓ Respect the Rules

 —Know all state and federal regulations.
- ✓ Respect Biology
 —We share responsibility for migratory bird and wetland resources throughout North America.
- ✓ Respect the Waterfowl Hunting Tradition—Setting up too close or downwind of other hunters is neither safe nor ethical.
- ✓ Respect the Resource—Use nontoxic shot; and be sure that birds are in range and that you identify your target before shooting.

Managed Waterfowl Hunting Areas

If you do not have a reservation for the following conservation areas, you must participate in the daily drawing or hunt with residents who have a reservation. For details, call the phone numbers noted after the area names or go to **www.mdc.mo.gov/18556**.



Zone Boundaries

North Zone: That portion of Missouri north of a line running west from the Illinois border at Lock and Dam 25; west on Lincoln County Hwy. N to Mo. Hwy. 79; south on Mo. Hwy. 79 to Mo. Hwy. 47; west on Mo. Hwy. 47 to I-70; west on I-70 to the Kansas border.

Middle Zone: The remainder of Missouri not included in other zones.

South Zone: That portion of Missouri south of a line running west from the Illinois border on Mo. Hwy. 34 to I-55; south on I-55 to U.S. Hwy. 62; west on U.S. Hwy. 62 to Mo. Hwy. 53; north on Mo. Hwy. 53 to Mo. Hwy. 51; north on Mo. Hwy. 51 to U.S. Hwy. 60; west on U.S. Hwy. 60 to Mo. Hwy. 21; north on Mo. Hwy. 21 to Mo. Hwy. 72; west on Mo. Hwy. 72 to Mo. Hwy. 32; west on Mo. Hwy. 32 to U.S. Hwy. 65; north on U.S. Hwy. 65 to U.S. Hwy. 54; west on U.S. Hwy. 54 to the Kansas border.

- 11 B. K. Leach CA (4,314 acres; Lincoln County) 573-898-5905. Walk-in hunting; water blinds; 1 ADA blind (636-441-4554); boats provided where needed; 1 p.m. closure. Drawing held at addition.
- 12 Bob Brown CA ▲ (3,302 acres; Holt County) 660-646-6122. Walk-in hunting; temporary blinds only; 1 ADA blind (816-271-3100); boat ramp; camping; permits and stamps; 1 p.m. closure.
- 13 Columbia Bottom CA ▲ (4,318 acres; St. Louis Co.) 314-877-6014. Walk-in hunting; temporary blinds only; boat ramp; permits and stamps; 1 p.m. closure.
- 14 Duck Creek CA (6,234 acres; Bollinger, Stoddard, Wayne counties) 573-222-3337. Walk-in hunting; flooded timber; goose pits; field hunting for geese; water blinds; 1 ADA blind (573-290-5730); boats provided for some blinds; boat ramp; camping; permits and stamps; 1 p.m. closure in designated areas. Note: Pool 8, part of Mingo National Wildlife Refuge and managed by the U.S. Fish & Wildlife Service and usually gets water late in the season.
- 15 Eagle Bluffs CA ▲ (4,440 acres; Boone County) 573-445-3882. Walkin hunting; temporary blinds only; 2 ADA blinds; permits and stamps; 1 p.m. closure.
- 16 Fountain Grove CA (7,154 acres; Linn and Livingston counties) 660-646-6122. Due to major pool renovation, hunting opportunities will be extremely limited. Walk-in hunting; no blinds; camping; permits and stamps; 1 p.m. closure.
- 17 Four Rivers CA (13,929 acres; Vernon and Bates counties) 417-395-2341. Units 1 and 2 have 8 shooting pools. Walk-in hunting; field hunting for geese; temporary blinds only; 1 ADA blind; boat ramps; camping; permits and stamps; open all day.

- 18 Grand Pass CA ▲ (5,096 acres; Saline County) 660-646-6122. Walkin hunting; field hunting for geese; temporary blinds only; 1 ADA blind; boat ramps; camping; permits and stamps; 1 p.m. closure.
- 19 Marais Temps Clair CA ▲ (935 acres; St. Charles County) 314-877-6014. Open to waterfowl hunting Friday—Monday only. Walk-in hunting; 1 ADA blind; 1 p.m. closure.
- 21 Montrose CA (3,979 acres; Henry County) 660-693-4666. Water blinds; 1 ADA blind; boat ramp; camping; permits and stamps; open all day.
- 22 Nodaway Valley CA (3,833 acres; Holt and Andrew counties) 660-646-6122. Walk-in hunting; water blinds; 1 ADA blind (816-271-3100); temporary blinds only; boat ramp; camping; permits and stamps; 1 p.m. closure in designated areas.
- 23 Otter Slough CA ▲ (4,866 acres; Stoddard county) 573-624-5821. Walk-in hunting; field hunting for geese; water blinds; temporary blinds only; 1 ADA blind; boats provided for blinds only; boat ramps; camping; permits and stamps; 1 p.m. closure.
- 24 Schell-Osage CA (8,633 acres; Vernon and St. Clair counties) 417-432-3414. Walk-in hunting; water blinds; 2 ADA blinds; boat ramp; camping; permits and stamps; 1 p.m. closure in designated areas.
- **26 Ted Shanks CA** (6,705 acres; Pike County) 573-248-2530. Walk-in hunting; water blinds; 1 ADA blind; boats provided; boat ramp; camping; permits and stamps; 1 p.m. closure in designated areas.
- 27 Ten Mile Pond CA ▲ (3,755 acres; Mississippi County) 573-649-2770. Walk-in hunting; field hunting for geese; temporary blinds only; boat ramp; permits and stamps; open all day.

Duck Identification Tips

Species restrictions in the daily bag require hunters to identify their target before shooting. Hunters should have in mind what species are expected to be present during the particular time of year, time of day and in the habi-

tat they are hunting. Once ducks are spotted, the flight characteristics of the flock will help. Small, compact, fast-flying flocks are more likely to be teal or shovelers, as compared to mallards, pintails or wigeon that are more likely to be seen in loose flocks. Divers tend to have a faster wing beat than dabblers, and canvasbacks tend to shift from wavy lines to V's.

If unsure of the species, the safest bet is to not shoot!

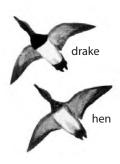
Color and individual silhouettes become more important when ducks are closer. Pintails are long and sleek with pointed wings, tails, and narrow necks. The prominent sloped bill of the canvasback is readily visible within gun range. Look for a white band on the wings to identify scaup.

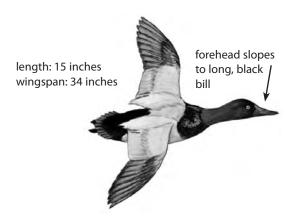
For additional help in identifying ducks, purchase the Conservation Department's 16-minute video, "The Key to Duck ID," by calling toll-free 877-521-8632 or on-line at www.mdcnatureshop.com. You can also find tips at: www.npwrc.usgs.gov/resource/birds/duckdist/index.htm

Canvasback -

The swiftest of all ducks, the canvasback has a rapid and noisy wingbeat. In the air, they look large and light colored compared to other divers. Drakes *croak*, *peep* and *growl*. Hens have a mallard-like *quack*.

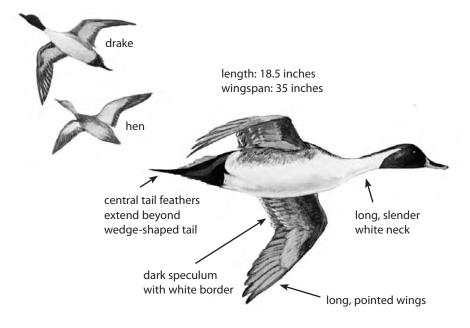
Season Closed!





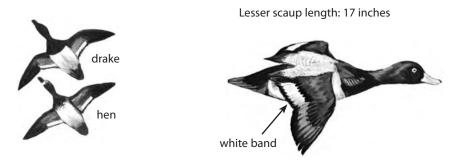
Pintail

These slender, graceful and fast fliers often zig-zag from great heights before leveling off to land. They may be seen in flocks with mallards. Drakes whistle. Hens have a course *quack*.



Scaup

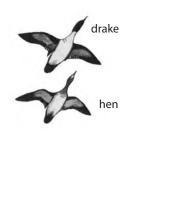
Except for the wing marks, greater and lesser scaup appear nearly identical in the field. The light band near the trailing edges of the wings runs almost to the tip in the greater scaup, but only about half way in the lesser. Scaup also look similar to ringnecked ducks. Flock movements are rapid, often erratic, usually in compact groups. Hens are silent. Lesser scaup drakes *purr*. Greater scaup drakes have a discordant *scaup*, *scaup*.



From "Ducks at a Distance: A Waterfowl Identification Guide."
Used with permission of the U.S. Fish and Wildlife Service.

Hooded Merganser

The short rapid wingstrokes of the hooded merganser gives the impression of great speed. They are often seen in pairs or very small flocks. It is unusual to hear them call in the fall.

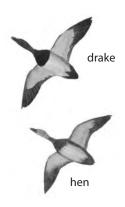


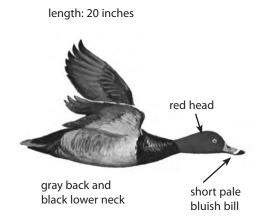
thin white strip on drake

white on trailing edge of wing

Redhead

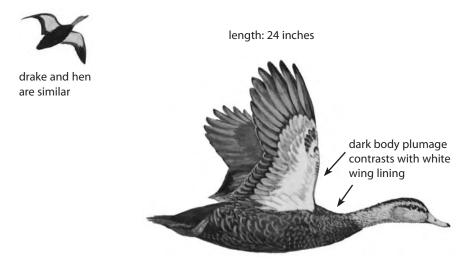
When flying, redheads give the impression of being in a hurry. In the air, they look similar to scaup and ring-necked drakes. They move in irregular formations over feeding areas, and often are found with canvasbacks. Drakes make a *purr* and *meow* sound; hens have a loud *squak*.





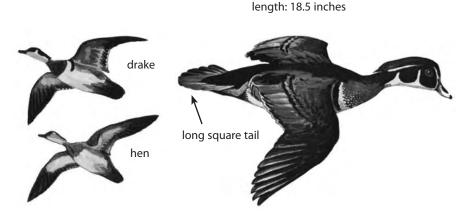
Black Duck

These shy and wary ducks are swift flyers, usually in small flocks. They may be seen with mallards. The hen's quack and the drake are similar to the calls of mallards.



Wood Duck

The flight of wood ducks is swift and direct. While flying, their wings make a rustling, swishing sound. Drakes call *hoo-w-ett*, often in flight; hens have a *cr-r-ek* when frightened.



From "Ducks at a Distance: A Waterfowl Identification Guide." Used with permission of the U.S. Fish and Wildlife Service.

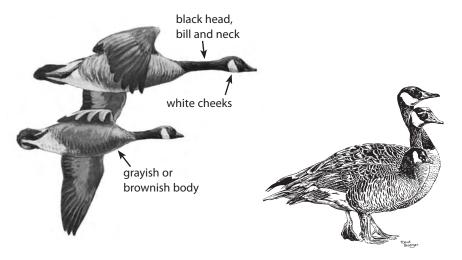
Goose Identification Tips

Because of the different bag limits, hunters must be able to identify the different goose species during flight. Watch for differences in coloration and voice. Be sure of the species before you shoot.

For additional help in identifying geese, go to **www.npwrc.usgs.gov/ resource/birds/waterfwl/index.htm**.

Canada Geese ·

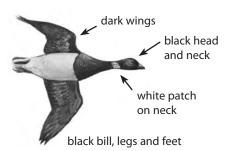
Canada geese are often called "honkers" because of their distinctive *honk*. All races have similar habits and voices.



vary in weight from 3 to more than 12 pounds, depending on race

Brant

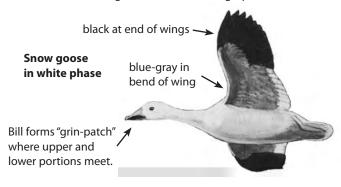
The swift flight of brants is in irregular and changing flock patterns. These birds are rarely seen in Missouri.



length: 24–25 inches weight: 3.25–3.75 pounds

Snow Geese

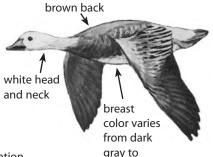
Snow geese have two color phases: white and blue. Immatures appear gray and can be confused with immature white-fronted geese. Their call is a high-pitched, *honk*.



Snow goose in blue phase

length: 29–31 inches weight: 6.5–7.5 pounds

Note: While identical to snow geese in coloration, Ross's geese have a shorter bill and no "grin patch."



white

upperparts are brown

White-fronted Geese ·

White-fronted geese fly in V-shaped flocks. Their call is a laugh-like series of high-pitched paired notes.

length: 29 inches weight 6.25 pounds base of bill white underparts with dark patches on adults

From "Ducks at a Distance: A Waterfowl Identification Guide."
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New Mentoring Option Available for Apprentice Hunters

Would you like to share those beautiful fall and winter days waterfowl hunting with a good friend or a spouse who has never hunted before? You know they would love it, but you can't get them to invest the time to take the hunter education course.

To help introduce adults to hunting, the Conservation Department now allows hunters age 16 and older who are not hunter-ed certified to hunt with firearms, as long as they:

- ▶ first purchase the new Apprentice Hunter Authorization for \$10
- ▶ then purchase a firearms hunting permit for the season they want to hunt; for example a Small Game Hunting Permit; along with other permit requirements
- ▶ hunt in the immediate presence of a properly licensed hunter 21 years old or older who is hunter-ed certified.

Note: The Apprentice Hunter Authorization allows the holder to purchase firearms permits throughout the permit year, and it can be purchased for two consecutive permit years. After the second year, the apprentice hunter will be required to become hunter-ed certified if he or she wants to continue hunting.

Missouri is a leader in hunter recruitment, and the Apprentice Hunter Authorization is just one more tool to help you share your hunting knowledge and tradition with your friends and family. And if your apprentice hunter wants to continue waterfowl hunting after two seasons, it's never been easier to get hunter-ed certified with the new online course, which is available at www.mdc.mo.gov/hunt/huntered/online.

As a mentor, you may also want to visit the online hunter-ed website as a review before you take your apprentice hunting. Or you and your apprentice may want to go over some of the lessons before you go hunting. Anyone can visit the website and review the lessons for free. A fee of \$15 is charged if and when the online test is processed.

Permit and Stamp Requirements

To pursue, take, possess, and transport ducks, coots, and geese in Missouri, except during the Conservation Order, all hunters age 16 and older, unless exempt, must have in their possession three permits as listed below. During the Conservation Order, Jan. 31–April 30, residents and nonresidents age 16 and older only need a *Migratory Bird Hunting Permit*. A federal *Migratory Bird Hunting and Conservation Stamp* and small game permit are not needed in Missouri during the Conservation Order.

Persons born on or after Jan. 1, 1967, must have completed an approved hunter education program in Missouri or elsewhere and display a Hunter Education Certificate Card before buying any firearms hunting permit, unless the hunter has first purchased an Apprentice Hunter Authorization. A hunter-ed card need not be displayed if certification can be verified at the vendor's computer terminal.

- **1.** Missouri residents age 16 through 64, unless exempt, and nonresidents age 16 and older, must have one of the following small game hunting permits:

 - Hunting and Fishing Permit (special requirements apply) \$5 ▶ Missouri Resident Lifetime Small Game Hunting Permit . . . varies by age
 - ► Missouri Resident Lifetime Conservation Partner Permit... varies by age

Exemption: Missouri resident landowners on their own land do not need any of the above.

- **2.** In addition to one of the above, residents and nonresidents age 16 and older must have a:
- **3.** In addition to the permits listed above, all hunters age 16 and older must have a:
 - ► Federal *Migratory Bird Hunting and Conservation Stamp* \$15 **Note:** This federal "duck" stamp must be signed in ink across the face.

Permit requirements for hunters aged 15 and under

▶ Resident and nonresident hunters age 15 and under are not required to purchase any permits to hunt ducks, coots or geese in Missouri. However, they must either be in the immediate presence of an adult who possess a Missouri small game hunting permit, or have in their possession a valid Hunter Education Certificate Card while hunting.

Where to Purchase Permits

Purchase a Missouri small game hunting permit and the Missouri Migratory Bird Hunting Permit:

- over the counter from any permit vendor
- ▶ by telephone anytime at (800) 392-4115*
- www.wildlifelicense.com/mo* *Credit card and \$2 per person

on-line anytime at

surcharge required.



Purchase the federal *Migratory Bird Hunting and Conservation Stamp* (duck stamp) at U.S. Post Offices and selected permit vendors.

Help stop zebra mussels

Zebra mussels have been found in Lake Taneycomo, Bull Shoals Lake, Lake of the Ozarks, the Mississippi and Missouri rivers, and in the Meramec River near St. Louis. Although less than 2 inches long, these exotics:



- CLOG the cooling systems of boat motors causing them to overheat.
- **PLUG** intake pipes, cutting off water supplies to cities and power plants.
- **RUIN** beaches with their sharp shells and rotting carcasses.
- **SPREAD** quickly. A single female can produce 1 million eggs a year.

To help stop the invasion of this European mussel: Inspect, Drain, Dump, Rinse, Dry!

- **INSPECT** your boat for mussels after each use, remove and trash mussels and water weeds before leaving any body of water.
- DRAIN all water from your boat, bait buckets and equipment before leaving any body of water and disinfect them.
- **RINSE** in hot water your boat's hull, drive unit, livewell and pump, bilge, trailer, bait bucket, engine cooling system and all other parts and accessories that get wet.
- DRY your boat, motor and trailer thoroughly for 5 days before boating again. Report sightings to Mussel Biologist, 1110 S. College Ave., Columbia, MO 65201, or call 573/882-9880. Save several mussel shells for identification by placing them in isopropyl alcohol or by freezing them.

Federal Regulations Summary

In addition to state regulations, the following federal rules apply to the taking, possession, transportation, shipment, and storage of waterfowl and other migratory birds. **Note:** This is only a summary; refer to Title 50, Part 20 of the Code of Federal Regulations at **www.gpoaccess.gov/cfr/**.

RESTRICTIONS: No person shall take waterfowl:

- With a trap, snare, net, rifle, pistol, swivel gun, shotgun larger than 10-gauge, punt gun, battery gun, machine gun, fishhook, poison, drug, explosive, or stupefying substance.
- With a shotgun capable of holding more than three shells, unless it is plugged with a one-piece filler which is incapable of removal without disassembling the gun except during the light goose Conservation Order.
- From a sink box (a low floating device, having a depression affording the hunter a means of concealment beneath the surface of the water).
- From or with the aid or use of a car or other motor-driven land conveyance, or any aircraft, except that paraplegics and single or double amputees of the legs may take from any stationary motor vehicle or stationary motor-driven land conveyance. Paraplegic means an individual afflicted with paralysis of the lower half of the body with involvement of both legs, usually due to disease of or injury to the spinal cord.
- From or by means of any motorboat or sailboat unless the motor has been completely shut off and/or the sail furled, and its progress therefrom has ceased.
- By the use or aid of live decoys. All live, tame, or captive ducks and geese shall be removed for a period of 10 consecutive days prior to hunting, and confined within an enclosure which substantially reduces the audibility of their calls and totally conceals such tame birds from the sight of migratory waterfowl.
- Using records or tapes of migratory bird calls or sounds, or electrically amplified imitations of bird calls except during the light goose Conservation Order.
- By driving, rallying, or chasing birds with any motorized conveyance or any sailboat to put them in the range of the hunters.
- By the aid of baiting (placing feed such as corn, wheat, salt, or other feed to constitute a lure or enticement), or on or over any baited area. Hunters should be aware that a baited area is considered to be baited for 10 days after the removal of the bait, and it is not necessary for the hunter to know an area is or was baited to be in violation. Agricultural areas must be prepared in accordance with official recommendations to be legally hunted. It is a separate offense to place bait on or adjacent to an area that causes, induces, or allows another to hunt by the aid of bait or over a baited area.

■ While possessing shot (either in shotshells or as loose shot for muzzle-loading) other than steel shot or such shot approved as nontoxic by the U.S. Fish & Wildlife Service.

CLOSED SEASON: No person shall take migratory game birds during the closed season.

SHOOTING OR HAWKING HOURS: No person shall take migratory game birds except during the hours open to shooting and hawking as prescribed.

DAILY BAG LIMIT: No person shall take in any one day more than one daily bag limit.

FIELD POSSESSION LIMIT: No person shall possess more than one daily bag limit while in the field or while returning from the field to one's car, hunting camp, motel, etc.

WANTON WASTE: All migratory game birds killed or crippled shall be retrieved, if possible, and retained in the custody of the hunter in the field.

TAGGING: No person shall give, put, or leave any migratory game birds at any place or in the custody of another person unless the birds are tagged by the hunter with the following information:

- 1. The hunter's signature.
- 2. The hunter's address.
- 3. Hunting permit number.
- 4. The total number of birds involved, by species.
- 5. The dates such birds were killed.

No person or business shall receive or have in custody any migratory game birds belonging to another person unless such birds are properly tagged.

POSSESSION OF LIVE BIRDS: Wounded birds reduced to possession shall be immediately killed and included in the daily bag limit.

DRESSING: No person shall completely field dress any migratory game bird (except doves) and then transport the birds from the field. The head or one full-feathered wing must remain attached to all such birds while being transported from the field to one's home or to a commercial preservation facility.

SHIPMENT: No person shall ship migratory game birds unless the package is marked on the outside with: (a) the name and address of the person sending the birds, (b) the name and address of the person to whom the birds are being sent, and (c) the number of birds, by species, contained in the package.

IMPORTATION: For information regarding the importation of migratory birds killed in another country, hunters should consult federal regulations 50 CFR 20.61 through 20.66. One fully-feathered wing must remain attached to all migratory game birds being transported between a port of

entry and one's home or to a migratory bird preservation facility. No person shall import migratory game birds killed in any foreign country, except Canada, unless such birds are dressed (except as required above), drawn, and the head and feet are removed. No person shall import migratory game birds belonging to another person.

DUAL VIOLATION: Violation of state migratory bird regulations is also a violation of federal regulations.

Shot Requirements

Shells possessed or used while hunting waterfowl or coots statewide, and other species as designated by posting on public areas, must be loaded with material approved as nontoxic by the U.S. Fish & Wildlife Service.

Shot types approved as being nontoxic are:

bismuth-tin	97% bismuth, 3% tin
iron (steel)	iron and carbon
iron-tungsten	any proportion of tungsten and \geq 1% iron
iron-tungsten-nickel	≥1% iron, any proportion of tungsten, up to 40% nickel
tungsten-bronze	51.1% tungsten, 44.4% copper, 3.9% tin, 0.6% iron or 60% tungsten, 35.1% copper, 3.9% tin, 1% iron
tungsten-iron-copper-nickel	40–76% tungsten, 10–37% iron, 9–16% copper, 5–7% nickel
tungsten-matrix	95.9% tungsten, 4.1% polymer
tungsten-polymer	95.5% tungsten, 4.5% nylon 6 or 11
tungsten-tin-iron	any proportions of tungsten and tin, $\geq 1\%$ iron
tungsten-tin-bismuth	any proportions of tungsten, tin and bismuth
tungsten-tin-iron-nickel	65% tungsten, 21.8% tin, 10.4% iron, 2.8% nickel

Check the U.S. Fish & Wildlife Service website at http://migratorybirds.fws.gov/issues/nontoxic_shot/nontoxic.htm for up-to-date information.

Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, national origin, sex, age or disability. Questions should be directed to the Department of Conservation, P.O. Box 180, Jefferson City, MO 65102, (573) 751-4115 (voice) or 800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.

Tips for Shooting Nontoxic Shot

Before heading out to your favorite hunting spot this fall, take time to pattern your gun and learn how nontoxic shot works with your shotgun chokes.

The most effective and ethical range for shooting gamebirds especially waterfowl is less than 45 yards. Most hunters' shooting skills and effectiveness decline significantly beyond 20 yards, and they often under estimate their distance, firing at

Be a better hunter: Know your effective target range before the season begins!

birds dramatically over 40 yards and out of effective and ethical range. To improve your waterfowl shooting skills, find your effective range with non-toxic shot by first practicing your shooting at 20 yards. Then slowly shoot at increasing distances to practice judging distances. This way you will learn where you can effectively shoot before you go hunting.

Some nontoxic shot, such as steel, do not deform like lead and other softer nontoxic shot, and, therefore, fly much straighter. A typical steel shot string is about 1/2 the length and width of the same size lead or softer shot string. This means you must be a better shot to put the smaller shot string of steel on target, but when you are on target there are more pellets available in a tighter pattern to hit the target. Plus, steel gives you about 1/3 more pellets in a load than a lead or heavier-than-lead load of the same weight.

To help hunters become more efficient and ethical harvesters of waterfowl and upland game using modern nontoxic ammunition, the Conservation Department is offering "Effective Wingshooting, the CONSEP Way" around the state. These classes are developed by scientific, fact-based, peer-reviewed research by the Cooperative North American Shotgunning Education Program (CONSEP) and contain information on choosing shot size, minimum pattern densities, distance estimation, better choke/load combinations and proven lead on target techniques. For more information about these programs, go to <code>www.mdc.mo.gov/hunt/gamebird/wingshooting</code> and remember to hunt safely.

Avian Influenza Precautions

As of August 2008, there is no evidence that the highly pathogenic H5N1 strain of bird flu is present in North America in either wild or domestic birds. However, the potential exists for wild migratory birds to carry the virus to North America, or for the virus to be introduced through the legal wild bird pet trade, shipment of goods from overseas, smuggling or other means.

As part of a national plan, the Conservation Department is helping monitor migratory birds for H5N1 bird flu. This effort will include sampling 1,000 hunter-harvested ducks and geese in Missouri. Waterfowl are susceptible to a number of diseases, and Department personnel regularly submit samples to the National Wildlife Health Center for diagnosis. It

should be noted that the observation of dead wild birds does not necessarily indicate the arrival of the virus; bird deaths can be caused by a variety of diseases, events or environmental factors. State and federal agencies are taking steps to minimize the potential impact of the occurrence of H5N1 avian flu should it occur within the United States.

For more information about avian influenza, go to:

www.mdc.mo.gov/hunt/wtrfowl/birdflu.htm www.pandemicflu.gov www.nwhc.usgs.gov/disease information/avian influenza

Proper Handling of Game Birds

Practice good hygiene when handling or cleaning wild birds. Here are some specific practices recommended by the U.S. Geological Survey National Wildlife Health Center:

- **1.** Do not handle or eat birds that are obviously sick or birds found dead. Contact the Conservation Department or a federal natural resource agency if you find sick or dead birds.
- **2.** Thoroughly wash hands with soap and water (or with an alcohol-based hand product if your hands are not visibly soiled) after handling and cleaning birds.
- **3.** Do not eat, drink or smoke while cleaning or handling birds.
- **4.** Wear rubber or disposable latex gloves while handling and cleaning game.
- 5. Keep your game birds cool, clean and dry.
- **6.** Clean all tools and surfaces immediately after cleaning birds; use hot soapy water, then disinfect with a 10 percent chlorine bleach solution.
- 7. Cook game meat thoroughly (well done or 160 degrees F).

Missourians have a new way to display their support for conservation: a bald eagle conservation heritage license plate, offered by the Missouri Conservation Heritage Foundation. For a \$25 annual tax-deductible donation to the



foundation, you can order your own eagle, bluebird or deer plate any time, regardless of your current plate expiration date. The foundation directs all donations to conservation projects, such as wetland protection and enhancement. You can pay the donation and pick up a Conservation Heritage License Plate Emblem Use Authorization Form at any permit vendor, or go to **www.mochf.org** or call 1-800-392-4115.



When hunting from a boat

- Leave a detailed float plan with family or friends.
- Check weather forecast. High wind can be dangerous. Cancel trip if water conditions aren't safe.
- ▶ Don't overload the boat.
- ▶ Load gear low in the boat and distribute the weight evenly.
- ▶ Wear a U.S. Coast Guard-approved life jacket at all times even if you can swim.
- ▶ If wearing chest waders, use a belt to keep them from filling up with water.
- ► Stow visual distress signals on board.
- ► Carry a throwable flotation device in case someone falls overboard.
- ► Transport firearms to the boat muzzle first with the action open, unloaded and cased.
- ▶ At the first sign of a storm, head for shore.

If your boat swamps or capsizes

- ► Stay with the boat, and use distress signals.
- ➤ To retain body heat, pull your knees to your chest and keep your elbows to your sides.
- ▶ If in chest waders, trap air by bending your knees and raising your feet. Lie back in the water.

Other ways to stay afloat

- ▶ Place an oar under the knees and another behind the back and shoulders.
- ▶ If in hip boots, trap air in the boots by bending your knees. Lie on your stomach.
- ▶ If decoys are in reach, stuff them inside your jacket.

Adaptive Harvest Management

Duck seasons, based on regulatory alternatives developed under the Adaptive Harvest Management Program, provide for a 60-day season with a six-duck daily bag limit in 2008–09 for the 12th consecutive year. Each year's regulation recommendation is based on the status of the mallard breeding population and the condition of prairie ponds in Canada. A three-tiered package of open seasons includes liberal (60 days), moderate (45 days) and restrictive (30 days) options. For more information, go to:

www.flyways.us/regulations-and-harvest/adaptive-harvest-management

SUNRISE AND SUNSET AT JEFFERSON CITY											
	SEPT	. 2008	ОСТ	2008	NOV	. 2008	DEC	. 2008	JAN. 2009		
DAY	Rise A.M.	Set P.M.									
1	6:38	7:38	7:05	6:51	7:36	6:08	7:08	4:48	7:26	4:59	
2	6:39	7:36	7:06	6:49	6:37	5:07	7:09	4:48	7:27	5:00	
3	6:40	7:35	7:07	6:48	6:38	5:06	7:10	4:48	7:27	5:00	
4	6:41	7:33	7:08	6:46	6:39	5:05	7:11	4:47	7:27	5:01	
5	6:42	7:32	7:09	6:45	6:40	5:04	7:12	4:47	7:27	5:02	
6	6:43	7:30	7:10	6:43	6:41	5:03	7:12	4:47	7:27	5:03	
7	6:44	7:29	7:11	6:42	6:42	5:02	7:13	4:47	7:27	5:04	
8	6:45	7:27	7:12	6:40	6:44	5:01	7:14	4:47	7:27	5:05	
9	6:45	7:26	7:12	6:39	6:45	5:00	7:15	4:48	7:26	5:06	
10	6:46	7:24	7:13	6:37	6:46	4:59	7:16	4:48	7:26	5:07	
11	6:47	7:22	7:14	6:36	6:47	4:58	7:17	4:48	7:26	5:08	
12	6:48	7:21	7:15	6:34	6:48	4:58	7:17	4:48	7:26	5:09	
13	6:49	7:19	7:16	6:33	6:49	4:57	7:18	4:48	7:26	5:10	
14	6:50	7:18	7:17	6:31	6:50	4:56	7:19	4:48	7:25	5:11	
15	6:51	7:16	7:18	6:30	6:51	4:55	7:19	4:49	7:25	5:12	
16	6:52	7:14	7:19	6:28	6:52	4:55	7:20	4:49	7:24	5:13	
17	6:52	7:13	7:20	6:27	6:53	4:54	7:21	4:49	7:24	5:14	
18	6:53	7:11	7:21	6:26	6:54	4:53	7:21	4:50	7:24	5:15	
19	6:54	7:10	7:22	6:24	6:56	4:53	7:22	4:50	7:23	5:16	
20	6:55	7:08	7:23	6:23	6:57	4:52	7:22	4:51	7:23	5:17	
21	6:56	7:07	7:24	6:22	6:58	4:51	7:23	4:51	7:22	5:19	
22	6:57	7:05	7:25	6:20	6:59	4:51	7:23	4:52	7:22	5:20	
23	6:58	7:03	7:26	6:19	7:00	4:50	7:24	4:52	7:21	5:21	
24	6:59	7:02	7:27	6:18	7:01	4:50	7:24	4:53	7:20	5:22	
25	7:00	7:00	7:28	6:16	7:02	4:50	7:25	4:54	7:20	5:23	
26	7:00	6:59	7:30	6:15	7:03	4:49	7:25	4:54	7:19	5:24	
27	7:01	6:57	7:31	6:14	7:04	4:49	7:25	4:55	7:18	5:25	
28	7:02	6:55	7:32	6:13	7:05	4:49	7:26	4:56	7:17	5:27	
29	7:03	6:54	7:33	6:12	7:06	4:48	7:26	4:56	7:17	5:28	
30	7:04	6:52	7:34	6:10	7:07	4:48	7:26	4:57	7:16	5:29	
31			7:35	6:09			7:26	4:58	7:15	5:30	

This table is for Jefferson City and points on the same longitude north and south. For locations east, subtract one minute for each 13.5 miles of airline distance. For locations west, add one minute for each 13.5 miles. Sunrise and sunset from Sept. 1 to Nov. 1 have been converted to daylight-saving time. To calculate the sunrise and sunset times anywhere in the United States, see the U.S. Naval Observatory web site: http://aa.usno.navy.mil/

Harvest Survey Needs Your Response

When you purchase your *Migratory Bird Hunting Permit*, the vendor asks you a series of questions about your last year's migratory bird hunting activities. The answers you provide place you in a category with other migratory bird hunters by type and amount of hunting activity. This allows the Conservation Department and the U.S. Fish & Wildlife Service, through the Migratory Bird Harvest Information Program, to use harvest surveys to sample hunters from each category. This survey information is considered when establishing migratory bird hunting seasons each year. If you are one of the hunters selected to receive a survey, please complete and return it even if you did not hunt or were unsuccessful while afield. By completing the survey, you are helping manage these important migratory birds.

2008-2009 Waterfowl Seasons

Zone	Youth Hunt	Ducks	Canada Geese and Brant	White-fronted Geese	Light Geese (snow, blue, Ross's)*		
North	Oct. 18–19	Oct. 25–Dec. 23	Sept. 27–Oct. 5				
Middle	Oct. 25–26	Nov. 1– Dec. 30	and	Nov. 22–Jan. 30	Oct. 25–Jan. 30		
South	Nov. 22–23	Nov. 27–Jan. 25	Nov. 22–Jan. 30				

*The **Conservation Order** for light geese will be in effect from **Jan. 31 through April 30, 2009,** with no bag limit. Hunters may use electronic calls and unplugged shotguns, and shoot from 1/2 hour before sunrise to 1/2 hour after sunset. A valid *Missouri Migratory Bird Hunting Permit* is the only permit required for residents and nonresidents during this time. A Missouri small game hunting permit and federal "duck" stamp are not required during the Conservation Order.

Daily Bag Limits

(see pages 6 and 7 for possession limits)

Duck Bag Limit

6 ducks daily including:

- No more than 4 mallards (2 females)
- No more than 3 each: mottled ducks wood ducks **New!**
- No more than 2 each: hooded mergansers redheads
- No more than 1 each: pintail black duck scaup New!

New! Canvasback season is closed.



Goose Bag Limits

- 3 Canada geese during the early season
- 2 Canada geese during the regular season
- 2 white-fronted geese
- 20 light geese
- 1 brant

For permit information, see pages 19–20.